

FIG. 1

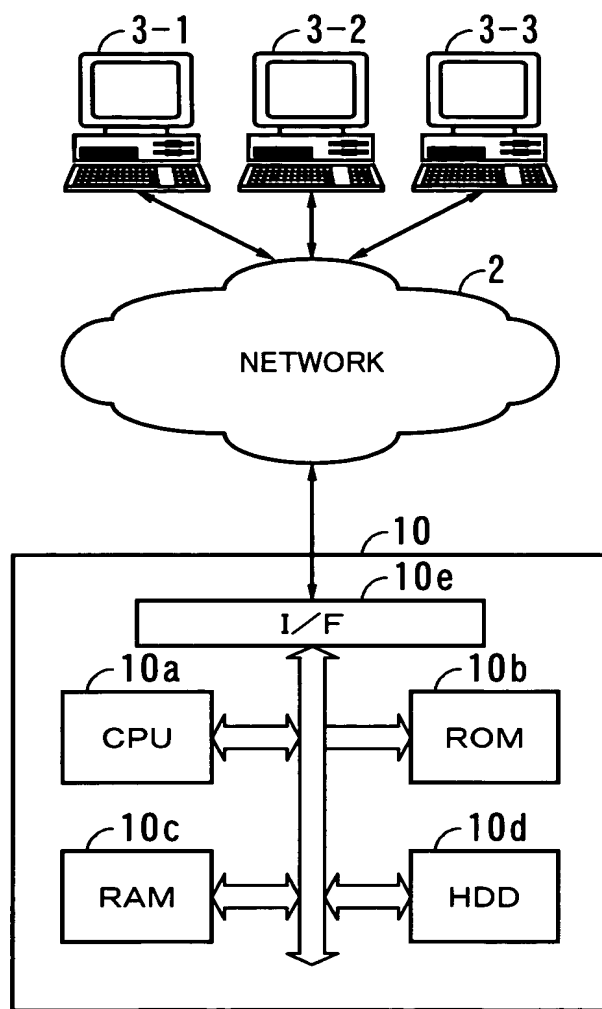


FIG. 2

00827T 4252260

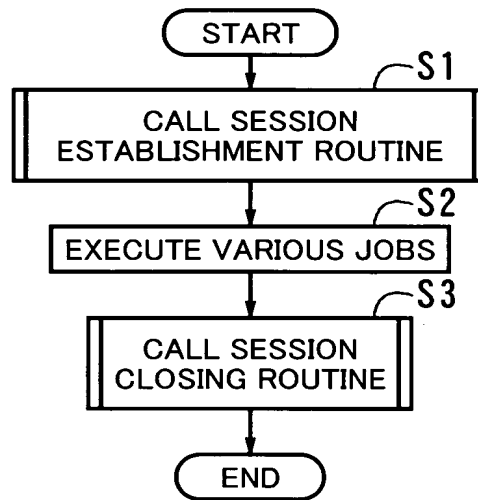


FIG. 3

02/26/24 - 11:00

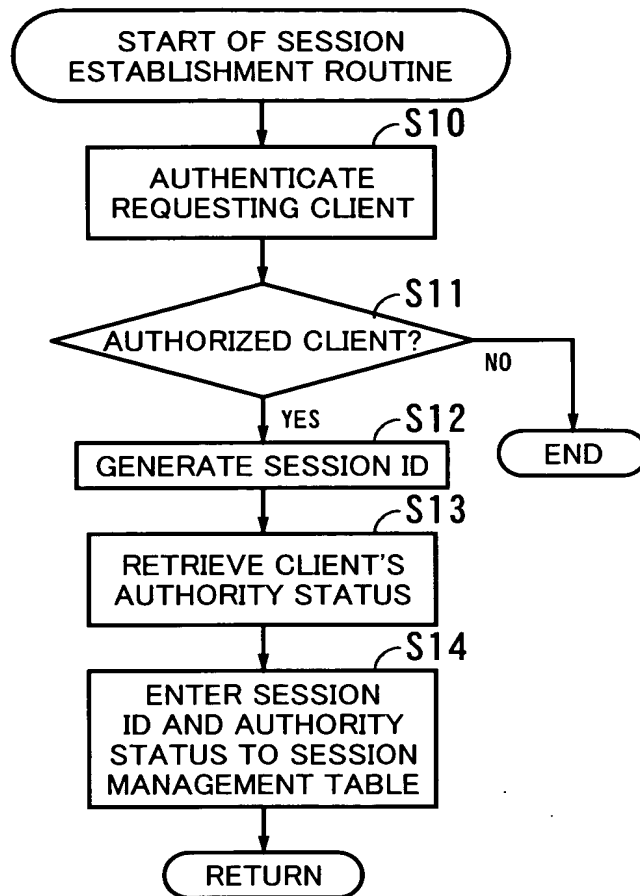


FIG. 4

CLIENT MANAGEMENT TABLE

CLIENT ID	GROUPING RIGHT	ALLOCATABLE GROUP	DEALLOCATABLE GROUP	RESOURCE REGISTRATION RIGHT	RESOURCE DEREGISTRATION RIGHT	RESOURCE DEALLOCATION RIGHT
C001	YES	G001, G003	G001, G003	YES	YES	YES
C002	YES	G001, G002	G001, G002	YES	YES	YES
C003	NO	G002	G002	NO	NO	NO

FIG. 5

SESSION MANAGEMENT TABLE

SESSION ID	CLIENT ID	GROUPING RIGHT	ALLOCATABLE GROUP	DEALLOCATABLE GROUP	RESOURCE REGISTRATION RIGHT	RESOURCE DEREGISTRATION RIGHT	RESOURCE DEALLOCATION RIGHT	ALLOCATED GROUP	R/W MODE
S001	C002	YES	G001, G002	G001, G002	YES	YES	YES	G001	R
S002	C001	YES	G001, G003	G001, G003	YES	YES	YES	G003	W
S003	C003	NO	G002	G002	NO	NO	NO		

FIG. 6

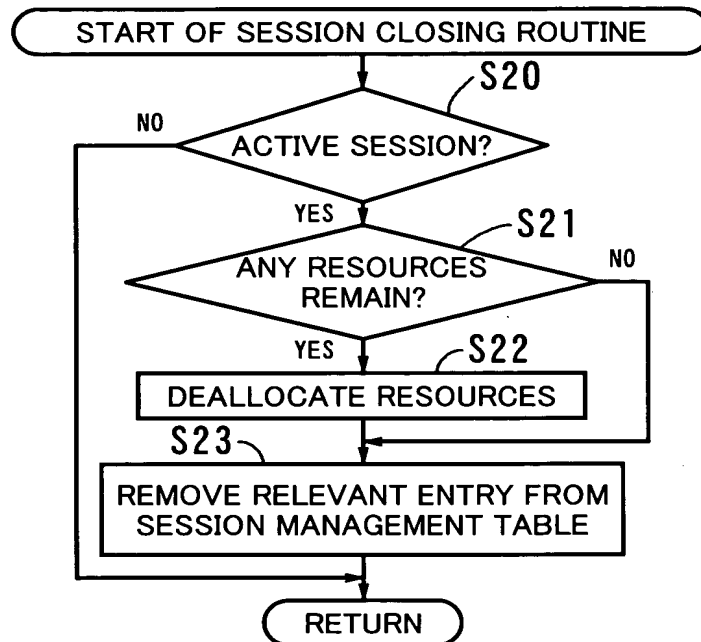


FIG. 7

GROUP MANAGEMENT TABLE

GROUP ID	VALID PERIOD	RESOURCE ID	RESOURCE ID	RESOURCE ID	RESOURCE ID	ASSOCIATE GROUP
G001	JAN 3,2000 2:00	R001	R005	R006		G002, G003
G002	JAN 2,2000 3:00	R001	R007			G001
G003	JAN 2,2000 5:00	R006				G001

FIG. 8



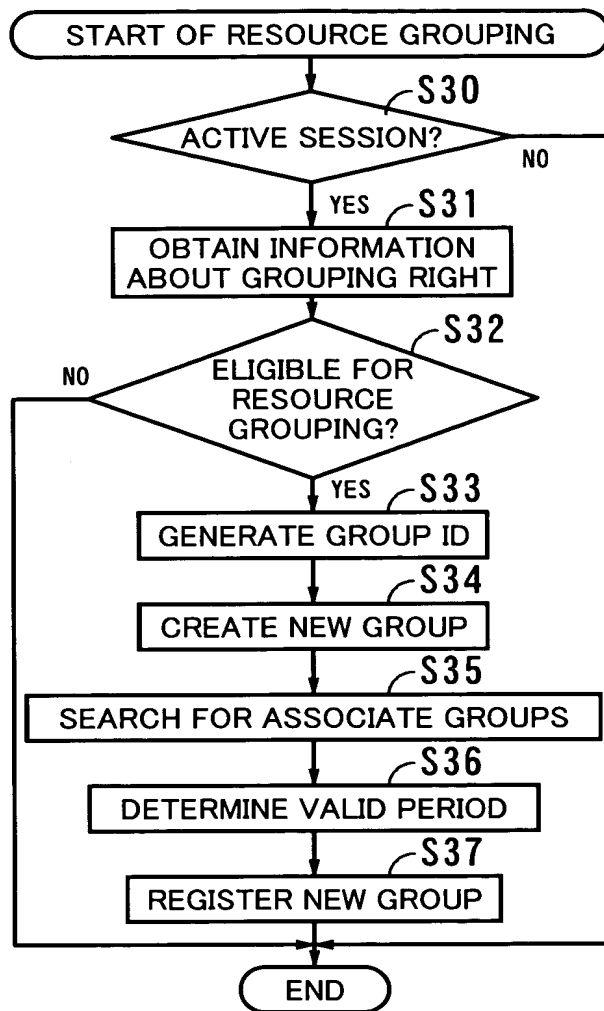


FIG. 9

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graph TD
    Start([START OF GROUP ALLOCATION]) --> S40{ACTIVE SESSION?}
    S40 -- YES --> S41[RETRIEVE INFORMATION ABOUT GROUP ALLOCATION RIGHT]
    S41 -- NO --> Exit1(( ))
    S41 --> S42{ELIGIBLE FOR GROUP ALLOCATION?}
    S42 -- NO --> Exit2(( ))
    S42 -- YES --> S43{ASSOCIATE GROUP IN WRITABLE MODE?}
    S43 -- YES --> Exit3(( ))
    S43 -- NO --> S44{REQUESTED GROUP TO BE USED IN WRITABLE MODE?}
    S44 --> Exit4(( ))
    S44 -- YES --> S45{ANY ASSOCIATE GROUP IN USE?}
    S45 -- YES --> Exit5(( ))
    S45 -- NO --> S46[ALLOCATE RESOURCE]
    S46 --> S47{ALL MEMBERS FINISHED?}
    S47 -- NO --> Exit6(( ))
    S47 -- YES --> S48[RECORD R/W MODE]
    S48 --> End([END])

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END

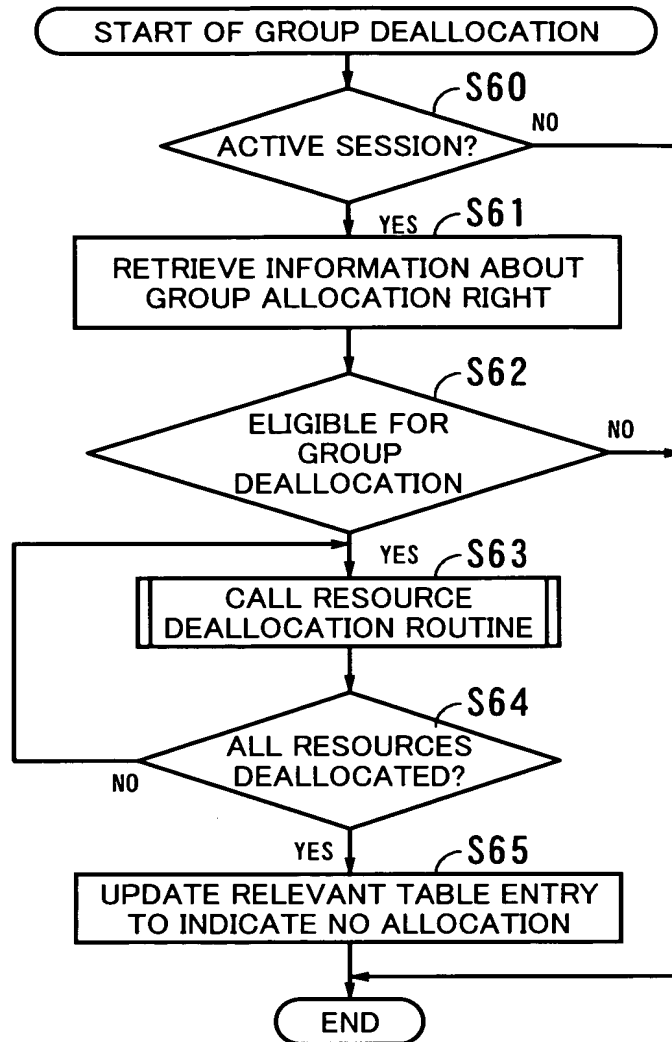


FIG. 11

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graph TD
    Start([START OF RESOURCE DEALLOCATION]) --> S70[RETRIEVE INFORMATION ABOUT  
RESOURCE DEALLOCATION RIGHT]
    S70 --> S71{ELIGIBLE FOR  
RESOURCE  
DEALLOCATION?}
    S71 -- NO --> End([END])
    S71 -- YES --> S72[DEALLOCATE RESOURCE]
    S72 --> S73{NEED INTERRUPT?}
    S73 -- YES --> S74[GENERATE RESOURCE  
DEALLOCATION INTERRUPT]
    S73 -- NO --> Return([RETURN])
    S74 --> Return
  
```

FIG. 12

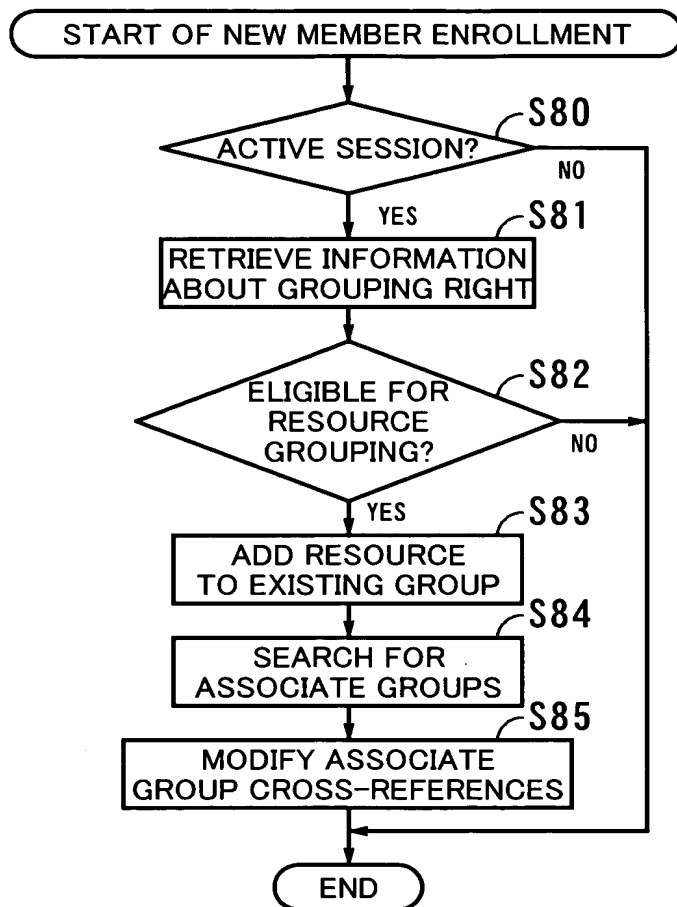


FIG. 13



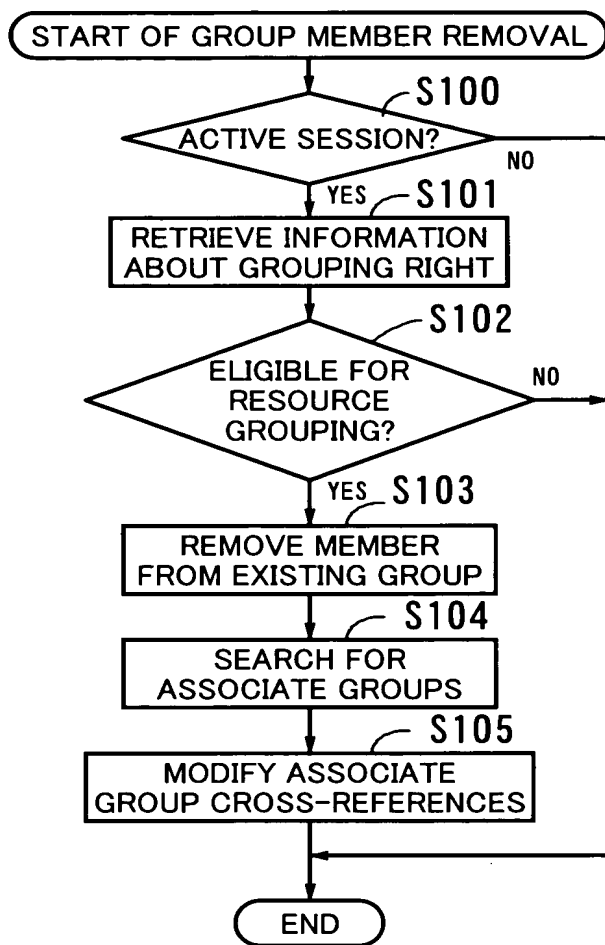


FIG. 15

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graph TD
    Start([START OF RESOURCE DEREGISTRATION]) --> S110{ACTIVE SESSION?}
    S110 -- NO --> Exit1(( ))
    S110 -- YES --> S111[RETRIEVE INFORMATION ABOUT RESOURCE DEREGISTRATION RIGHT]
    S111 --> S112{ELIGIBLE FOR RESOURCE DEREGISTRATION?}
    S112 -- NO --> Exit1
    S112 -- YES --> S113{RESOURCE IS BUSY?}
    S113 -- NO --> S114{DEALLOCATION INTERRUPT RECEIVED?}
    S113 -- YES --> S114
    S114 -- NO --> S114
    S114 -- YES --> S115[DEREGISTER RESOURCE]
    S115 --> S116[UPDATE GROUP MANAGEMENT TABLE]
    S116 --> End([END])
    Exit1 --> End

```

END